

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : William Teague et al. Art Unit : 3694
Serial No. : 09/941,491 Examiner : MEINECKE DIAZ, S.
Filed : August 29, 2001 Conf. No. : 6239
Title : A MARKET INDICATOR PROCESS AND METHOD

Mail Stop Amendment

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY TO ACTION OF JULY 31, 2007

37 C.F.R. §1.105 Requirement for Information

The assignee of this application responds to the Requirement for Information under 37 C.F.R. 1.105, as follows:

The assignee Nasdaq Stock Market assigned Ms. Katherine Mitchel, Director of Nasdaq Financial Products to assist with preparation of this reply. Ms. Mitchel is very familiar with Nasdaq Index products and ETF's (electronically traded funds).

The inventors of this application are no longer employed by the assignee and were not available to the undersigned.

The examiner's requirement has been parsed into different requests that are represented below in **bold small font size**. To the extent practical, the examiner's own words were used, but the examiner is referred to the office action for the precise words used.

Products and services embodying the disclosed and claimed subject matter

Pre-market indicator and after-market indicator on the Nasdaq 100 index.

and identify the properties of similar products and services found in the prior art.

None known by Katherine Mitchel

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Securities and Exchange Commission's article regarding electronic communication networks (ECNs) and after-hours trading (<http://www.sec.gov/news/studies/ecnafter.htm>). Nasdaq® pilot program for extended-hours trading.

The temporary or "pilot" Nasdaq program referred to in the article discussed extension of the operation of key trade and price reporting systems until 6:30 p.m. (SelectNet, Automated Confirmation Transaction Service, and the Nasdaq Trade Dissemination Service.) As emphasized in the article the pilot "simply extended the post-close operation of some key systems from 5:15 p.m. to 6:30 p.m." Under the pilot, NASD members can post quotations and trade securities on a voluntary basis and it lays out rules for posting of firm quotations by a Nasdaq market maker (if voluntarily participating is obligated to post firm two-sided quotations when opening and making its market.)

However, nothing in this discussion pertains to the claimed subject matter. Rather, the discussion is relevant to what Applicant had previously discussed in the background of the invention section, as prior art.

Page 22 mention of special rules for extended-hours trading.

The description on page 22 is set forth below:

Nasdaq officials have informed The Commission staff that they are considering whether it might be appropriate to apply some additional trading rules to the Extended-Hours Pilot. As noted above, NASD Rule 3350 ("NASD Short Sale Rule") is currently applicable only to the Nasdaq regular session. Nasdaq officials are seeking to determine if the after-hours market has developed to the point that the application of the NASD Short Sale Rule to trading from 4:00 p.m. to 6:30 p.m. would be beneficial to mitigate the high levels of price volatility that are often experienced after the regular session close.'" Similarly, Nasdaq officials are considering whether the application of NASD rules prohibiting "locked" and "crossed" markets for quotations from 4:00 p.m. to 6:30 p.m. would improve the trading environment during this period '^ Eventually, Nasdaq will determine whether to propose a full-fledged after-hours trading session in which market-maker participation would be mandatory and all normal trading rules would apply..

This subject matter is directed to trading rules and not to the subject matter of the claimed invention. Rather, the discussion is relevant to what Applicant had previously discussed in the background of the invention section, as prior art.

Since this disclosure was made public more than one year prior to Applicant's earliest priority date of August 29, 2001, the Examiner requests information regarding the contents of this pilot program.

The contents of the pilot program are discussed in the article and as discussed above are not relevant to the claimed subject matter.

The differences between Nasdaq's pilot program and the claimed invention?

The pilot program was directed to trading and therefore differs in that it did not include the subject matter of the instant claims.

Also, who are the inventors of Nasdaq's pilot program?

The subject matter of the pilot program is not relevant to the subject matter of the claimed invention and therefore the request for this information is improper.

Additionally, it is respectfully requested that Applicants and Assignee provide any information regarding products or services offered by other entities (e.g., inventors or assignees) that are related to the claimed invention of tracking index prices based on after or extended hour trading.

As mentioned in the Background: "As these electronically-traded stock markets allow for this "extended-hours" trading, if a security included in a stock index is traded during these "extended-hours", the value of that security will typically change as a result of this trading activity. Accordingly, the value of any stock index including the traded security will also change. Unfortunately, the value of this stock index which includes the traded security would not be recalculated until the beginning of the regular trading session (i.e., non-extended-hours) for that stock market."

Further, did the Securities and Exchange Commission implement any rules that required changes to be made in how after hours trades affect an opening index price, as recited in the claimed invention?

Index calculations do not require SEC approval. Therefore, there would be no SEC required rule changes.

How were after hours trades previously handled?

As mentioned in the Background: "As these electronically-traded stock markets allow for this "extended-hours" trading, if a security included in a stock index is traded during these

“extended-hours”, the value of that security will typically change as a result of this trading activity. Accordingly, the value of any stock index including the traded security will also change. Unfortunately, the value of this stock index which includes the traded security would not be recalculated until the beginning of the regular trading session (i.e., non-extended-hours) for that stock market.”

The Examiner has also come across Nasdaq®'s index descriptions in the web site, <http://quotes.nasdaq.com/reference/IndexDescriptions.stm>. On page 5 of the printed version of this web site, there is a section entitled "NASDAQ Index Calculation Description." How do these formulas relate to the claimed invention and, if related, when were these calculations first publicly used or disclosed and who invented or derived them?

The descriptions on page 5 pertain to calculation of a Market Capitalization Weighted Index. The subject matter of these claims, however, is directed to producing an opening price for inclusion in an index based on after hours trading, and as such, while the subject matter of the invention could be used to determine the prices of the securities used in the formulas on page 5, the subject matter is not disclosed in the web page. These formulas are not related to the subject matter of the claims, as noted for instance in the specification: “The manner in which closing price variation calculation process 38 calculates the predicted opening index price 421-n of each of the security indexes 301-n varies depending on whether the index is a market capitalization weighted index or a stock weighted index.”¹

Are the claimed calculations derived from well-known portfolio calculations?

Not to Katherine Mitchel's knowledge.

Nasdaq®'s web site <URL:[http://dynamic.nasdaq.com/dynamic/nasdaq100 indicator after.stm](http://dynamic.nasdaq.com/dynamic/nasdaq100%20indicator%20after.stm)> describes the "NASDAQ-100 After Hours Indicator", which allows after-hours trades to be tracked in order to glean a trend for market sentiment and allows bad trades to be filtered out of the calculations. These features seem to represent the underlying concepts in the claimed invention.

This page, from the Nasdaq website (apparently from July 20, 2007), is not prior art to the subject matter of these claims and the article clearly mentions that there are key differences

¹ Specification page 8, lines 13-16.

between pre-market indicator and after-hours indicator and the calculation used in the Nasdaq 100 during regular trading hours.

The article "This Dinner Theater Features Tragedies" (Hansard et al.) also discloses the Nasdaq-100 After Hours Indicator as well as its precursor, the Nasdaq-100 Pre-Market Indicator.

This article is not 102(b) prior art to this application and on its face is clearly reporting on activities of the inventors of this application as it refers to the activities of the assignee, and does not mention any details of the subject matter of the claimed invention.

How do both the Pre-Market Indicator and After Hours Indicator relate to or differ from the claimed invention?

Related to the claimed subject matter.

When were these products first publicly used, sold, and disclosed? Who invented these indicators?

To the best of Katherine Mitchel's knowledge these products were used/disclosed less than one year before the filing date of the subject application. The inventors of these indicators are those listed in the current application and the related applications referred to therein.

Applicant will in accordance with its continuing duty under 1.56 will supplement this answer if the Assignee determines that this answer was wrong.

Are there any other similar products or services in the market known to Applicants or Assignee?

Not prior to the filing date of this application. There may be products on the market now.

The Examiner has not been able to locate information in the prior art regarding the disclosed and claimed "predicated opening index price." Please provide background information on what is meant by a "predicated opening index price."

Applicant described that: "Closing price variation calculation process 38 calculates the predicted opening index price 42_{1-n} of each of the monitored security indexes 30_{1-n} for the beginning of the next regular trading session. This calculation of the predicted opening index price 42_{1-n} of a security index 30_{1-n} is based on the closing index price 33_{1-n} of that specific

security index 30_{1-n} and the extended-hours trading activity of the securities 32_{1-n} included in that security index 30_{1-n}.”

Applicant also described that the techniques employed differ depending on the type of index being calculated: “The manner in which closing price variation calculation process 38 calculates the predicted opening index price 42_{1-n} of each of the security indexes 30_{1-n} varies depending on whether the index is a market capitalization weighted index or a stock weighted index.”

Please charge the required fee of \$1640 to Deposit Account No. 06-1050. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: January 31, 2008

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